

#15  
Response  
6/25/03  
algIN THE UNITED STATES  
PATENT AND TRADEMARK OFFICE

## Patent Application

Inventor(s): Chyan, Yih Feng  
Hergenrother, John  
Monroe, Donald

Case: 15-6-9

Serial No.: 09/648164

Filing Date: August 25, 2000

Examiner: Dickey

Group Art Unit: 2826

Title: Architecture for Circuit Connection Of A Vertical Transistor

I hereby certify that this correspondence is being faxed to  
the United States Patent and Trademark Office to the fax  
number (703) 872-9318 on 6/25/03Mary V. Lachar  
Printed name of person mailing paper or fee  
Signature of person mailing paper or fee

FAX RECEIVED

ASSISTANT COMMISSIONER FOR PATENTS  
WASHINGTON, D. C. 20231-

JUN 19 2003

TECHNOLOGY CENTER 2800

## RESPONSE UNDER 37 C.F.R. 1.116

Sir:

This paper is filed in response to the final office action mailed on 3/19/03. Claims 1, 13 and 14 have been finally rejected. Claims 9 and 15-19 are allowed while claims 2-8 and 10-12 would be allowable if written in independent form.

To assure the examiner's continued consideration of the argument provided herein, and to preserve applicants' right to appeal the final rejections, a Notice of Appeal from the final rejections is filed on the same date as the filing of this response. A copy of the Notice of Appeal is included with this correspondence.

The claims 1, 13 and 14 were rejected under Section 102 based on newly cited art, i.e., Chang et al. Claim 1 requires "a conductive layer formed between the first and second regions ..." Applicants' Figure 6 discloses an exemplary embodiment in which a conductive layer 120 meets this requirement.

The final office action characterizes Chang as disclosing "...a conductive layer 14 formed between the first and second regions and above the plane ..." In presenting this rejection the examiner identified (in Figure 2B of Chang) the first region as N++ drain region 22 and the second region as the other N++ region in the center of the figure.

In fact, the structure disclosed in Chang '367 does not comply with the recited requirement of claim 1 for the very same reason that applicant was able to distinguish the recited requirement from the disclosure of Ishijima '397 in the prior response (filed 2/13/03). That is, as stated at page 4 of that response, Ishijima's conductive layer cannot be used to describe a structure that is "between the first and second regions."


Chang discloses the layer 14 as "the drain contact metallization 14 configured on the top major surface of the substrate." See Col. 5, lines 15-17. It is clear from Figure 2B that, while this layer 14 may provide an electrical connection between two N++ regions, that layer 14 is not "formed between the first and second regions."

The claimed structure is totally lacking from the Chang reference and none of the other art of record can compensate for this deficiency. Accordingly, withdrawal of the rejections is requested.

It is also noted that claims 13 and 14 include a combination of features which further distinguish the invention. That is, with "a conductive layer formed between the first and second regions ..." claim 13 requires that the conductive layer be "a continuous film extending from the first region to the second region" and claim 14 requires that "the conductive layer physically contacts the first region and the second region." Each of these combinations is absent from the art of record.

For all of the above reasons it is submitted that the rejected claims are allowable and it is requested that the application be passed to issuance.

Respectfully submitted,

  
Ferdinand M. Romano  
Reg. No. 32,752  
407-371-3250

Date: June 19, 2003

FAX RECEIVED

JUN 19 2003

TECHNOLOGY CENTER 2800